



# Morbidity and Mortality

Vol. 18, No. 9

WEEKLY  
REPORTFor  
Week Ending  
March 1, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE, HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

DATE OF RELEASE: MARCH 7, 1969 - ATLANTA, GEORGIA 30333

## EPIDEMIOLOGIC NOTES AND REPORTS

## BOTULISM - Pendleton, Oregon

A 76-year-old man from Pendleton died from botulism on Feb. 17, 1969. On February 15, he had eaten kippered white fish and two home-canned vegetables: string beans and pumpkin in pumpkin pie. Approximately 9-12 hours later, he developed diarrhea, followed by diplopia, dysphagia, and dryness of the mouth. He was afebrile. On February 16, he was hospitalized; a diagnosis of botulism was considered and 40,000 units of type AB antiserum were administered. Following treatment, he appeared to improve, but 15 hours later, he deteriorated rapidly and died.

In the afternoon of February 16, a relative had visited the patient's home. She tasted but apparently did not swallow some leftover pumpkin pie. She noted that it was insufficiently cooked and had an unpalatable taste.

## CONTENTS

Epidemiologic Notes and Reports	
Botulism - Pendleton, Oregon	69
Hepatitis Outbreak - Garfield, New Jersey	70
Influenza - United States	70
Follow-Up Trichinosis - Washington, Missouri	71
International Notes	
Smallpox - West and Central Africa	76

Laboratory analysis of the foods demonstrated type A botulinum toxin and *Clostridium botulinum* type A organisms in the pumpkin pie. Post mortem serum from the patient and a blood specimen from his relative were both negative for toxin.

(Reported by C. Evan Dillon, Senior Sanitarian, Umatilla County Health Department; Gordon C. Edwards, M.D., Acting Director, Epidemiology Section, and Vivien E.

(Continued on page 70)

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	9th WEEK ENDED		MEDIAN 1964 - 1968	CUMULATIVE, FIRST 9 WEEKS		
	March 1, 1969	March 2, 1968		1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis	32	30	29	268	238	239
Brucellosis	7	1	4	16	8	32
Diphtheria	2	2	2	22	28	28
Encephalitis, primary:						
Arthropod-borne & unspecified	11	19	21	174	133	209
Encephalitis, post-infectious	3	13	17	38	73	92
Hepatitis, serum	106	57	843	870	579	7,286
Hepatitis, infectious	980	786	64	7,760	7,225	702
Malaria	65	51	5	423	411	48
Measles (rubeola)	630	715	8,664	3,771	4,845	57,056
Meningococcal infections, total	80	64	64	702	717	702
Civilian	78	55	---	667	659	---
Military	2	9	---	35	58	---
Mumps	2,364	4,749	---	19,814	42,947	---
Poliomyelitis, total	---	---	---	1	3	2
Paralytic	---	---	---	1	3	2
Rubella (German measles)	1,184	1,205	---	6,095	6,894	---
Streptococcal sore throat & scarlet fever	13,624	11,309	12,202	100,571	102,187	98,291
Tetanus	2	2	2	15	15	26
Tularemia	6	1	2	20	15	40
Typhoid fever	3	4	6	37	30	47
Typhus, tick-borne (Rky. Mt. spotted fever)	---	---	---	1	3	6
Rabies in animals	90	72	81	594	648	648

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	---	Rabies in man:	---
Botulism: Ore.-1	1	Rubella congenital syndrome: Ore.-1	1
Leptospirosis: Calif.-1, Fla.-1, Hawaii-1, Ohio-1	9	Trichinosis:	13
Plague:	---	Typhus, murine:	2
Psittacosis: N.C.-1	6		

## BOTULISM — (Continued from front page)

*Runte, Public Health Nurse, Oregon State Board of Health; and Gatlin R. Brandon, M.P.H., Director, Oregon State Public Health Laboratories.)*

## Editorial Comment:

Type A toxin is known to bind rapidly to tissue. Although the type-specific antiserum was administered and post treatment serum was negative for toxin, the 24 hours between ingestion and treatment in this case was sufficient for the A toxin to adhere irreversibly to the patient's myoneural tissue.

This is the third report of botulism attributed to pumpkin since botulism was first recognized in the United States. The two other outbreaks occurred in 1940 and 1943; one was due to type A and in the other the toxin was unknown.<sup>1</sup> There were nine cases with seven deaths in these three outbreaks.

## Reference:

<sup>1</sup>Meyer, K.F. and B. Eddie: *Fifty Years of Botulism in the United States and Canada*. George Williams Hooper Foundation, University of California, San Francisco, 1950.

## HEPATITIS OUTBREAK — Garfield, New Jersey

An outbreak of infectious hepatitis traced to contaminated food prepared in the delicatessen of a large supermarket occurred in Bergen County between Jan. 11 and Feb. 17, 1969. The index case was the 26-year-old manager of the delicatessen who became ill on January 11. Two fellow employees developed symptoms on February 7 and 12, respectively. The remaining nine cases occurred between February 4 and 17 among 23 persons (attack rate 39 percent) who ate food from the delicatessen that was served at a party on January 11. Of these nine cases, six had the diagnosis of hepatitis made by a physician and four of these were hospitalized. The other five cases were treated at home. These nine persons ranged in age from 22 to 30 years and included five men and four women. Their symptoms included malaise, fever, anorexia, nausea, scleral icterus, and jaundice; all had dark urine. All nine persons denied a history of contact with a known case of hepatitis, ingestion of raw shellfish during the 6 weeks

prior to illness, transfusions, and use of parenteral drugs.

Food histories from all 23 persons at the party implicated sloppy Joe sandwiches as the vehicle of infection. The sloppy Joe sandwiches, one of 20 food items served, were triple-decker sandwiches of rye bread, cole slaw, roast beef, corned beef, turkey, and Russian dressing. Although the index case prepared the Russian dressing from commercial products of catsup and mayonnaise, he did not recall making the sandwiches.

The 12 physicians in Garfield and 12 hospitals serving the Bergen County community were contacted about other possible hepatitis cases, but no other cases could be related to the delicatessen.

(Reported by Ronald Altman, M.D., Director, Howard Rosenfeld, V.M.D., Paul Marzinsky, and Virginia Traister, R.N., Division of Preventable Diseases, New Jersey State Department of Health; Leonard Hilson, Health Officer of Bergen County Health Department; and two EIS Officers.)

## INFLUENZA — United States

Between Feb. 22 and March 1, 1969, documented influenza B activity was reported from Pennsylvania, Colorado, Georgia, North Carolina, Oklahoma, Kansas, and Iowa (Figure 1), and an increase in febrile respiratory disease was reported from Louisiana.

In the first week of February in Philadelphia, an outbreak of respiratory disease occurred in a high school. The school absenteeism increased to 10 percent. The illness consisted of cough, coryza, and mild fever, and two influenza B viral isolates were recovered from seven throat washings. In addition, two influenza B isolates were obtained from two children admitted to different local hospitals because of respiratory illness.

During the last 2 weeks of February in central Colorado, school absenteeism rates of 25-45 percent reflected increased influenza activity. Children in kindergarten through grade 3 were predominantly affected with less involvement in older children and adults. Laboratory documentation included 45 influenza B isolates and several A2/Hong Kong/68 isolates.

During the last 2 weeks of February in Atlanta, Georgia, an outbreak of an influenza-like disease consisting of mild sore throat, fever, headache, malaise, dry cough, and some gastrointestinal symptoms occurred in a children's home. Physical findings included pharyngitis,

Figure 1  
DOCUMENTED INFLUENZA B ACTIVITY  
AS REPORTED TO NCDC  
NOV. 7, 1968 — MARCH 1, 1969



anterior cervical nodes, and a clear chest to auscultation. To date, 21 of the 145 children in the home have been ill (attack rate 14.5 percent). Laboratory documentation included three confirmed and four suspect influenza B viral isolates.

Louisiana reported widespread scattered outbreaks of febrile respiratory disease characterized by sore throat and fever with minimal myalgia, and some nausea, vomiting, and diarrhea. The illness lasted from 2 to 3 days and predominantly affected elementary school children. School absenteeism rates were as high as 30 to 40 percent and several schools closed. Laboratory documentation is pending.

In early January, one case of influenza B documented by a fourfold rise in hemagglutination inhibition antibody titer to B/Mass./3/66 occurred in Scotland County, North Carolina.

During the past week, Oklahoma and Kansas reported additional influenza activity (MMWR, Vol. 18, Nos. 6 and 7). In Oklahoma, 20 counties experienced influenza-like disease, and at least one school in 10 counties closed because of excessive school absenteeism. In areas involved, school absenteeism rates were approximately 20 to 25 percent, which is twice as high as those reported during the A2/Hong Kong/68 activity earlier this season. The illness predominantly affected school age children. Four influenza B isolates were obtained from junior high school students in Oklahoma City. In Kansas, considerable excess absenteeism continued in several rural schools.

As of March 1, 19 geographically scattered cases of influenza B have been confirmed by serology.

In February, Iowa reported widespread influenza B activity with absenteeism rates of 35-45 percent in the elementary and junior high schools in some areas that had experienced A2/Hong Kong/68 influenza earlier in this influenza season. However, influenza activity in Iowa is now declining.

(Reported by Lewis D. Polk, M.D., Deputy Health Commissioner for Community Health Services, and David Faris, M.D., Division of Epidemiology, Philadelphia Department of Public Health; W. D. Schrack, Jr., M.D., Director, Division of Communicable Disease Control, Pennsylvania Department of Health; C. S. Molloy, M.D., Chief, Epidemiology Section, Colorado State Department of Public Health; John E. McCroan, Ph.D., Director, Epidemiologic Investigations Branch, Georgia State Department of Health; Charles T. Caraway, D.V.M., Chief, Section of Epidemiology, Louisiana State Department of Health; Martin P. Hines, D.V.M., Director, Division of Epidemiology, North Carolina State Board of Health; R. LeRoy Carpenter, M.D., Director, Division of Epidemiology, Oklahoma State Department of Health; Donald E. Wilcox, M.D., Director, Section of Epidemiology, Kansas State Department of Health; Donald M. Reeve, M.D., Chief, Preventive Medical Service, Iowa State Department of Health; Laboratory Program, and Respiratory Diseases Unit, Viral Diseases Section, Epidemiology Program, NCDC; and EIS Officers.)

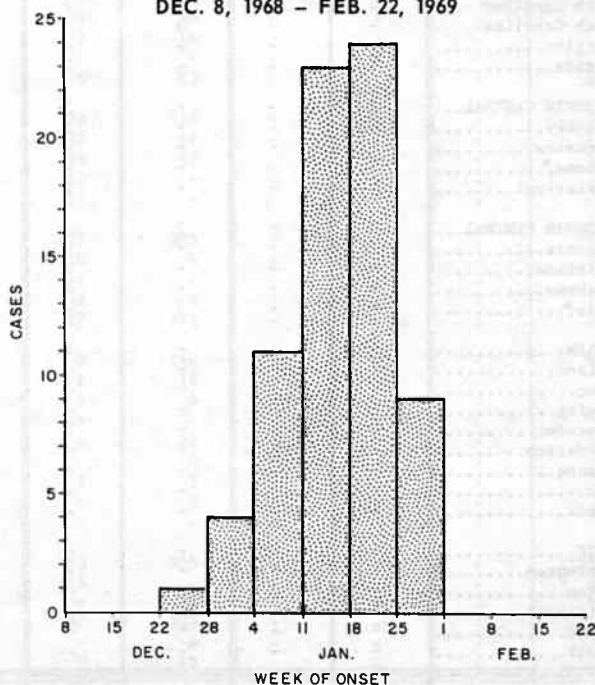
#### FOLLOW-UP TRICHINOSIS – Washington, Missouri

Since the initial report of the outbreak of trichinosis in Washington (MMWR, Vol. 18, No. 4), trichinosis has been confirmed in 76 persons by positive bentonite flocculation and charcoal card tests on one or more sera. Two of the 76 also had positive muscle biopsies. The persons had onset of illness between the weeks of Dec. 22, 1968, and Feb. 1, 1969 (Figure 2). The clinical illnesses varied in severity and duration, and some persons had excessive fatigue, malaise, and weakness up to 6 weeks after onset. Some patients were treated with thiabendazole and/or steroids. Evaluation of the effectiveness and side effects of this therapy is in progress.

The outbreak was due to locally manufactured pork summer sausage which was not processed adequately to destroy viable trichina larvae. The incriminated product was distributed between mid-December and mid-January. The implicated sausage was voluntarily removed from sale, unsold sausage was impounded by the state department of agriculture, and a recall campaign was instituted to obtain all potentially contaminated sausage.

(Reported by E. A. Belden, M.D., Director, Bureau of Communicable Disease Control, Missouri Division of Health; Parasitology Section, Laboratory Division, and Parasitic Diseases Section, Epidemiology Program, NCDC; and an EIS Officer.)

FIGURE 2  
CONFIRMED CASES OF TRICHINOSIS BY WEEK OF ONSET\*  
WASHINGTON, MISSOURI  
DEC. 8, 1968 – FEB. 22, 1969



\*WEEK OF ONSET UNKNOWN IN 4 CASES

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED  
MARCH 1, 1969 AND MARCH 2, 1968 (9th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post- Infectious	Serum	Infectious		1969	Cum. 1969
				1969	1968	1969		1969	1968		
UNITED STATES...	32	7	2	11	19	3	106	980	786	65	423
NEW ENGLAND.....	-	-	-	-	-	-	3	44	27	1	23
Maine*	-	-	-	-	-	-	-	3	4	-	-
New Hampshire*	-	-	-	-	-	-	-	3	-	-	3
Vermont.....	-	-	-	-	-	-	-	2	-	-	-
Massachusetts.....	-	-	-	-	-	-	-	23	10	1	19
Rhode Island*	-	-	-	-	-	-	-	-	11	-	-
Connecticut.....	-	-	-	-	-	-	3	13	2	-	1
MIDDLE ATLANTIC.....	10	1	-	2	4	-	42	171	128	9	39
New York City.....	7	-	-	-	4	-	31	77	30	-	-
New York, up-State.	-	-	-	1	-	-	6	22	26	1	6
New Jersey.....	2	-	-	-	-	-	5	28	34	6	17
Pennsylvania.....	1	1	-	1	-	-	-	44	38	2	16
EAST NORTH CENTRAL...	4	-	-	3	5	2	5	166	161	5	24
Ohio.....	-	-	-	3	1	2	1	45	59	-	1
Indiana*	1	-	-	-	1	-	1	16	8	-	-
Illinois.....	-	-	-	-	-	-	-	35	42	4	10
Michigan.....	3	-	-	-	3	-	3	55	31	1	12
Wisconsin.....	-	-	-	-	-	-	-	15	21	-	1
WEST NORTH CENTRAL...	-	2	-	-	-	-	3	33	66	4	27
Minnesota.....	-	-	-	-	-	-	3	11	14	-	1
Iowa.....	-	1	-	-	-	-	-	4	9	-	3
Missouri.....	-	-	-	-	-	-	-	2	37	-	6
North Dakota.....	-	1	-	-	-	-	-	6	-	-	1
South Dakota.....	-	-	-	-	-	-	-	-	-	-	-
Nebraska.....	-	-	-	-	-	-	-	3	2	1	2
Kansas.....	-	-	-	-	-	-	-	7	4	3	14
SOUTH ATLANTIC.....	2	4	-	3	1	-	5	83	67	29	154
Delaware.....	-	-	-	-	-	-	-	1	1	-	-
Maryland.....	1	-	-	-	1	-	4	10	13	1	3
Dist. of Columbia..	-	-	-	-	-	-	-	-	4	-	-
Virginia.....	-	3	-	1	-	-	-	8	7	-	8
West Virginia.....	-	1	-	1	-	-	-	3	11	-	-
North Carolina*	-	-	-	1	-	-	1	22	7	25	76
South Carolina.....	-	-	-	-	-	-	-	7	-	-	15
Georgia.....	-	-	-	-	-	-	-	12	10	-	42
Florida.....	1	-	-	-	-	-	-	20	14	3	10
EAST SOUTH CENTRAL...	2	-	-	2	-	-	-	87	58	-	14
Kentucky.....	-	-	-	1	-	-	-	34	17	-	10
Tennessee.....	-	-	-	-	-	-	-	31	31	-	-
Alabama*	2	-	-	-	-	-	-	15	3	-	4
Mississippi.....	-	-	-	1	-	-	-	7	7	-	-
WEST SOUTH CENTRAL...	3	-	2	-	3	-	-	88	71	-	9
Arkansas.....	2	-	-	-	-	-	-	11	11	-	4
Louisiana.....	-	-	-	-	2	-	-	21	10	-	5
Oklahoma.....	1	-	-	-	1	-	-	6	11	-	-
Texas*	-	-	2	-	-	-	-	50	39	-	-
MOUNTAIN.....	-	-	-	1	1	-	-	44	18	9	33
Montana.....	-	-	-	-	-	-	-	10	2	-	-
Idaho.....	-	-	-	-	-	-	-	4	-	1	1
Wyoming.....	-	-	-	-	-	-	-	-	-	-	-
Colorado.....	-	-	-	1	1	-	-	5	1	8	30
New Mexico.....	-	-	-	-	-	-	-	6	7	-	1
Arizona.....	-	-	-	-	-	-	-	5	3	-	1
Utah.....	-	-	-	-	-	-	-	14	5	-	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	11	-	-	-	5	1	48	264	190	8	100
Washington.....	-	-	-	-	1	-	-	32	24	2	2
Oregon.....	-	-	-	-	1	-	-	23	17	2	5
California.....	11	-	-	-	3	1	45	209	147	4	85
Alaska.....	-	-	-	-	-	-	-	-	1	-	-
Hawaii.....	-	-	-	-	-	-	3	-	1	-	8
Puerto Rico.....	-	-	-	-	-	-	-	29	7	-	-

\*Delayed reports: Diphtheria: Tex. 4 (1968)

Hepatitis, Infectious: Me. 2, N.H. 3, R.I. 11, Ind. Delete 3, Ala. 1

Malaria: N. C. Delete 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
MARCH 1, 1969 AND MARCH 2, 1968 (9th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1969	1969	1968	1969	1969	1968	1969	1969	1969	Cum. 1969	1969
UNITED STATES...	630	3,771	4,845	80	702	717	2,364	-	-	1	1,184
NEW ENGLAND.....	26	174	178	1	21	37	349	-	-	-	77
Maine*.....	-	2	9	-	1	2	25	-	-	-	2
New Hampshire*.....	8	37	29	-	-	3	1	-	-	-	-
Vermont.....	-	-	-	-	-	1	44	-	-	-	9
Massachusetts*.....	3	34	82	-	10	17	96	-	-	-	36
Rhode Island*.....	-	3	1	-	3	4	34	-	-	-	7
Connecticut.....	15	98	57	1	7	10	149	-	-	-	23
MIDDLE ATLANTIC.....	132	1,022	597	12	93	91	119	-	-	-	63
New York City.....	98	677	111	3	18	18	48	-	-	-	26
New York, Up-State.....	7	100	346	2	17	9	NN	-	-	-	7
New Jersey.....	22	113	108	4	31	29	71	-	-	-	30
Pennsylvania.....	5	132	32	3	27	35	NN	-	-	-	-
EAST NORTH CENTRAL...	44	381	1,297	8	86	70	580	-	-	-	272
Ohio.....	3	42	101	4	27	17	39	-	-	-	30
Indiana.....	7	79	206	2	14	10	43	-	-	-	33
Illinois.....	11	72	587	2	11	12	68	-	-	-	24
Michigan.....	8	51	85	-	28	23	138	-	-	-	82
Wisconsin.....	15	137	318	-	6	8	292	-	-	-	103
WEST NORTH CENTRAL...	30	107	95	11	37	30	164	-	-	-	129
Minnesota.....	-	-	2	1	7	6	2	-	-	-	1
Iowa.....	10	51	22	1	4	3	136	-	-	-	73
Missouri.....	10	11	6	6	14	4	11	-	-	-	1
North Dakota.....	-	2	44	-	-	1	13	-	-	-	33
South Dakota.....	-	-	3	-	-	3	NN	-	-	-	-
Nebraska.....	10	43	11	-	2	1	2	-	-	-	21
Kansas.....	-	-	7	3	10	12	-	-	-	-	-
SOUTH ATLANTIC.....	132	733	360	11	141	163	198	-	-	-	194
Delaware.....	3	6	2	-	3	-	2	-	-	-	4
Maryland.....	1	6	30	1	15	10	10	-	-	-	52
Dist. of Columbia..	-	-	4	-	2	5	-	-	-	-	-
Virginia*.....	65	239	64	2	22	12	19	-	-	-	4
West Virginia.....	24	67	101	1	5	3	70	-	-	-	26
North Carolina.....	10	46	48	4	18	39	NN	-	-	-	-
South Carolina.....	6	44	8	-	16	35	14	-	-	-	2
Georgia.....	-	-	3	-	26	21	-	-	-	-	-
Florida.....	23	325	110	3	34	38	83	-	-	-	106
EAST SOUTH CENTRAL...	-	28	96	2	32	58	114	-	-	-	78
Kentucky.....	-	8	37	-	8	22	67	-	-	-	22
Tennessee.....	-	6	15	-	15	14	47	-	-	-	52
Alabama*.....	-	-	24	2	7	11	-	-	-	-	-
Mississippi.....	-	14	20	-	2	11	-	-	-	-	4
WEST SOUTH CENTRAL...	224	1,060	1,151	10	93	177	385	-	-	1	92
Arkansas*.....	-	2	-	1	11	10	4	-	-	-	-
Louisiana.....	1	2	1	5	31	42	-	-	-	-	2
Oklahoma.....	-	101	47	-	4	38	9	-	-	-	12
Texas.....	223	955	1,103	4	47	87	372	-	-	1	78
MOUNTAIN.....	16	72	256	1	20	8	146	-	-	-	70
Montana*.....	-	2	53	1	1	1	58	-	-	-	1
Idaho.....	-	-	7	-	3	2	9	-	-	-	1
Wyoming.....	-	-	28	-	-	-	-	-	-	-	1
Colorado.....	1	7	82	-	3	4	21	-	-	-	58
New Mexico.....	8	30	30	-	4	-	8	-	-	-	-
Arizona.....	6	31	53	-	6	1	48	-	-	-	9
Utah.....	1	1	1	-	1	-	2	-	-	-	-
Nevada.....	-	1	2	-	2	-	-	-	-	-	-
PACIFIC.....	26	194	815	24	179	83	309	-	-	-	209
Washington.....	-	10	231	2	10	15	-	-	-	-	44
Oregon.....	-	30	182	2	6	9	22	-	-	-	17
California.....	26	146	382	20	157	57	255	-	-	-	136
Alaska.....	-	7	-	-	-	-	4	-	-	-	1
Hawaii.....	-	1	20	-	6	2	28	-	-	-	11
Puerto Rico.....	8	96	72	-	2	13	11	-	-	-	6

\*Delayed reports: Measles: N.H. 23, Mass. Delete 4, R.I. 1, Va. 1, Mont. 1

Meningococcal Infections: Ala. 1, Ark. 1

Mumps: Me. 36, R.I. 47

Rubella: Me. 3, R.I. 10

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MARCH 1, 1969 AND MARCH 2, 1968 (9th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES....	13,624	2	15	6	20	3	37	-	1	90	594
NEW ENGLAND.....	1,898	-	-	-	-	-	-	-	-	-	2
Maine.*.....	22	-	-	-	-	-	-	-	-	-	1
New Hampshire.*.....	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	8	-	-	-	-	-	-	-	-	-	1
Massachusetts.....	255	-	-	-	-	-	-	-	-	-	-
Rhode Island.*.....	123	-	-	-	-	-	-	-	-	-	-
Connecticut.....	1,490	-	-	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	639	-	1	-	1	-	5	-	-	2	8
New York City.....	22	-	-	-	1	-	4	-	-	-	-
New York, Up-State.....	519	-	1	-	-	-	1	-	-	2	8
New Jersey.....	NN	-	-	-	-	-	-	-	-	-	-
Pennsylvania.....	98	-	-	-	-	-	-	-	-	-	-
EAST NORTH CENTRAL...	1,064	-	3	1	1	-	1	-	-	4	24
Ohio.....	161	-	-	-	-	-	1	-	-	2	4
Indiana.....	290	-	-	1	1	-	-	-	-	-	3
Illinois.....	197	-	1	-	-	-	-	-	-	1	5
Michigan.....	231	-	2	-	-	-	-	-	-	-	-
Wisconsin.....	185	-	-	-	-	-	-	-	-	1	12
WEST NORTH CENTRAL...	651	-	-	2	3	-	-	-	-	19	104
Minnesota.....	87	-	-	-	-	-	-	-	-	6	27
Iowa.....	220	-	-	-	-	-	-	-	-	4	20
Missouri.....	13	-	-	2	3	-	-	-	-	7	37
North Dakota.....	107	-	-	-	-	-	-	-	-	2	16
South Dakota.....	18	-	-	-	-	-	-	-	-	-	-
Nebraska.....	188	-	-	-	-	-	-	-	-	-	-
Kansas.....	18	-	-	-	-	-	-	-	-	-	4
SOUTH ATLANTIC.....	1,501	-	4	3	9	1	3	-	-	23	203
Delaware.....	48	-	-	-	-	-	-	-	-	-	-
Maryland.....	280	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia..	-	-	2	-	-	-	-	-	-	-	-
Virginia.....	388	-	-	-	-	-	-	-	-	11	138
West Virginia.....	450	-	-	-	2	-	-	-	-	5	25
North Carolina.....	35	-	1	-	4	-	1	-	-	-	-
South Carolina.....	61	-	1	-	-	-	1	-	-	-	-
Georgia.....	14	-	-	-	-	-	-	-	-	2	15
Florida.....	225	-	-	3	3	1	1	-	-	5	25
EAST SOUTH CENTRAL...	1,896	-	-	-	2	1	4	-	1	20	109
Kentucky.....	271	-	-	-	-	-	-	-	-	13	71
Tennessee.....	1,222	-	-	-	2	1	3	-	1	7	32
Alabama.....	211	-	-	-	-	-	-	-	-	-	6
Mississippi.....	192	-	-	-	-	-	1	-	-	-	-
WEST SOUTH CENTRAL...	1,107	1	3	-	2	1	7	-	-	13	70
Arkansas.....	5	-	-	-	-	-	5	-	-	-	2
Louisiana.....	17	1	2	-	-	-	-	-	-	-	4
Oklahoma.....	126	-	1	-	2	-	-	-	-	1	10
Texas.....	959	-	-	-	-	1	2	-	-	12	54
MOUNTAIN.....	3,660	-	-	-	2	-	10	-	-	1	13
Montana.....	35	-	-	-	-	-	-	-	-	-	-
Idaho.....	145	-	-	-	-	-	-	-	-	-	-
Wyoming.....	440	-	-	-	-	-	5	-	-	-	3
Colorado.....	2,507	-	-	-	-	-	1	-	-	-	1
New Mexico.....	282	-	-	-	1	-	2	-	-	1	5
Arizona.*.....	93	-	-	-	-	-	1	-	-	-	1
Utah.....	157	-	-	-	1	-	-	-	-	-	-
Nevada.....	1	-	-	-	-	-	1	-	-	-	3
PACIFIC.....	1,208	1	4	-	-	-	7	-	-	8	61
Washington.....	264	-	-	-	-	-	-	-	-	-	-
Oregon.....	126	-	-	-	-	-	-	-	-	-	-
California.....	668	1	4	-	-	-	7	-	-	8	61
Alaska.....	11	-	-	-	-	-	-	-	-	-	-
Hawaii.....	139	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	4	1	1	-	-	-	-	-	-	2	5

\*Delayed reports: SST: Me. 8, N.H. 51, R.I. 190

Typhoid: Ariz. Delete 2



9

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

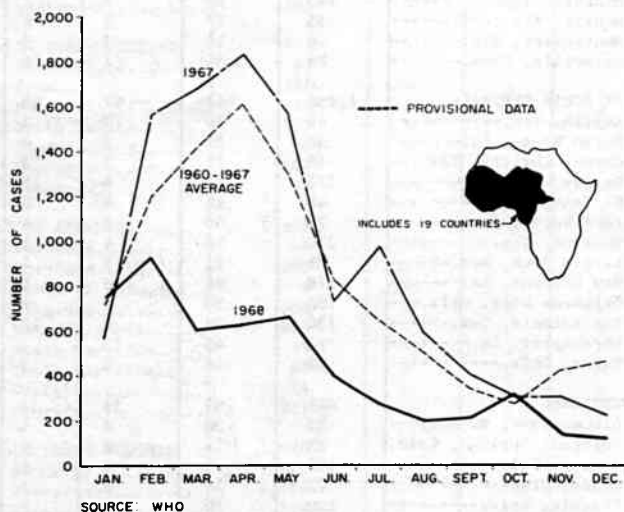
\*Estimate - based on average percent of divisional total.

# INTERNATIONAL NOTES

## SMALLPOX - West and Central Africa<sup>1</sup>

In 1968\*, 5,330 smallpox cases were recorded in the 19 countries participating in the West and Central African Smallpox Eradication/Measles Control Program (MMWR, Vol. 17, No. 37). These cases are a 50.7 percent reduction from the 10,813 reported in 1967. In 1968 except for October, a continuing decrease in the monthly incidence of cases was noted from 1967 and from the monthly average for the years 1960-1967, even in the months normally having seasonal increases (Figure 3). The increase in October probably reflects the recent intensification of surveillance activities to include active case detection which was responsible for identifying several previously unrecognized epidemics. Immediately upon detection of an epidemic, vaccination teams are dispatched to undertake epidemic control measures.

Figure 3  
REPORTED SMALLPOX CASES BY MONTH, 1967 AND 1968  
AND MONTHLY AVERAGES 1960-67  
WEST AND CENTRAL AFRICA



Since January 1, 1967, approximately 70 million smallpox vaccinations have been administered in the combined population of the 19 countries of 116 million people.

### Reference:

<sup>1</sup>World Health Organization Weekly Epidemiological Record 44(8):150.

\*Provisional data

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 17,000 IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER

CHIEF, EPIDEMIOLOGY PROGRAM  
CHIEF, STATISTICS SECTION

DAVID J. SENCER, M.D.  
A. D. LANGMUIR, M.D.  
IDA L. SHERMAN, M.S.

EDITOR  
MANAGING EDITOR

MICHAEL B. GREGG, M.D.  
PRISCILLA B. HOLMAN

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

NATIONAL COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333  
ATTN: THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES AT CLOSE OF BUSINESS ON FRIDAY; COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THE PUBLIC ON THE SUCCEEDING FRIDAY.

U.S. DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION  
NATIONAL  
COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333  
OFFICIAL BUSINESS

DR. MICHAEL B. GREGG  
53-2  
868  
OFFICE OF THE CHIEF  
EPIDEMIOLOGY PROGRAM

POSTAGE AND FEES PAID  
U. S. DEPARTMENT OF H. E. W.